

t53_fib_num2
(TMJj3ZyQ2LtPRhSPdmuK9Wa2npyvk2zCxoj)

October 27, 2020

Let $k5_fib_num2 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_setfam_1 : \iota \Rightarrow o$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k2_fib_num2 : \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k14_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_fib_num2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_fib_num2 : \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $k15_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v2_finseq_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.k3_xboole_0 X0 \ k1_xboole_0 = k1_xboole_0 \quad (2)$$

Assume the following.

$$m1_subset_1 \ k1_xboole_0 \ k4_ordinal1 \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (5)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (6)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(k2_finseq_1\ X0 = k1_finseq_1\ X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.v1_relat_1\ (k2_zfmisc_1\ X0\ X1) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k5_numbers)\Rightarrow(v1_setfam_1\ (k1_finseq_1\ X0)) \quad (9)$$

Assume the following.

$$v1_xboole_0\ k1_xboole_0 \quad (10)$$

Assume the following.

$$\forall X0.((v7_ordinal1\ X0)\wedge(v1_xboole_0\ X0))\Rightarrow(v1_xboole_0\ (k1_finseq_1\ X0)) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1\ X0)\wedge(v1_xboole_0\ X1))\Rightarrow((v1_xboole_0\ (k5_relat_1\ X0\ X1))\wedge(v1_relat_1\ (k5_relat_1\ X0\ X1))) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xboole_0\ X0)\wedge(v1_relat_1\ X1))\Rightarrow((v1_xboole_0\ (k3_relat_1\ X1\ X0))\wedge(v1_relat_1\ (k3_relat_1\ X1\ X0))) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1\ X1\ X0)\Rightarrow((v1_relat_1\ X1)\wedge(v1_funct_1\ X1)\wedge(v1_finseq_1\ X1)) \quad (14)$$

Assume the following.

$$m2_subset_1\ k6_numbers\ k1_numbers\ k5_numbers \quad (15)$$

Assume the following.

$$(v1_funct_1\ k2_fib_num2)\wedge((v1_funct_2\ k2_fib_num2\ k5_numbers\ k5_numbers)\wedge(m1_subset_1\ k2_fib_num2\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ k5_numbers)))) \quad (16)$$

Assume the following.

$$\forall X0.m2_finseq_1\ (k14_finseq_1\ X0)\ k5_numbers \quad (17)$$

Assume the following.

$$\forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (k5_fib_num2 X0 = k1_fib_num2 k2_fib_num2 (k3_xboole_0 k3_fib_num2 (k2_finseq_1 X0))) \quad (18)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k5_numbers) \wedge \\ (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k5_numbers)))) \Rightarrow \\ (\forall X1.((v1_finset_1 X1) \wedge ((v1_setfam_1 X1) \wedge (v6_membered \\ X1)))) \Rightarrow (k1_fib_num2 X0 X1 = k15_finseq_1 (k5_relat_1 X0 X1))) \end{aligned} \quad (19)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v2_finseq_1 X0))) \Rightarrow (k15_finseq_1 X0 = k3_relat_1 (k14_finseq_1 (k9_xtuple_0 X0) X0)) \quad (20)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v7_ordinal1 X0) \quad (21)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v2_finseq_1 X0))) \quad (22)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_relat_1 X1)) \quad (23)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_relat_1 X0) \quad (24)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_funct_1 X0) \quad (25)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v1_finset_1 X0) \quad (26)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_xboole_0 X0)) \Rightarrow ((v1_relat_1 X0) \wedge (v1_finseq_1 X0)) \quad (27)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v6_membered X0) \quad (28)$$

Theorem 1 $k5_fib_num2 k6_numbers = k1_xboole_0.$